CLAIM AMENDMENTS

1. (Currently Amended) A method comprising:

generating an integrated circuit design;

creating a design database containing design data for ~~each~~ a layer of the design;

creating context information for features of ~~a~~ the layer ~~of the design~~;

analyzing the context information to identify important attributes of features of the layer;

partitioning the layer into a plurality of ~~stripes~~ geographical regions;

assigning each feature to one or more of the plurality of ~~stripes~~ regions based upon the importance of the attributes of the feature; and

devising a writing plan to write each feature within the corresponding ~~stripe~~ region.

2. (Currently Amended) The method of claim 1, wherein analyzing the context information to identify important features comprises:

identifying important attributes of the design; and

identifying polygons with the important attributes.

3. (Currently Amended) The method of claim 2, further comprising:

dividing each important polygon into a plurality of shapes; and

for each polygon, identifying shapes with important attributes.

4. (Currently Amended) The method of claim 3, wherein assigning each feature to one ~~stripe~~ region comprises assigning each shape to one or more ~~stripes~~ regions, consistent with the attributes of each shape.

5. (Currently Amended) The method of claim 1, wherein analyzing the context information to identify important features comprises:

displaying the design data for the layer to a user;

displaying the context information for the features of the layer to the user;

receiving an identification of the important attributes of features from the user.

6. (Currently Amended) The method of claim 5, wherein assigning each important feature to one of the ~~stripes~~ regions comprises receiving an assignment of the feature to one ~~stripe~~ region from the user.

7. (Original) The method of claim 6, further comprising calculating a writing time for the writing plan.

8. (Original) The method of claim 7, further comprising accepting or rejecting the writing plan based on the writing time.

9. (Original) The method of claim 1, wherein analyzing the context information to identify important features comprises automatically locating important features of the layer based on the context information.

10. (Currently Amended) The method of claim 9, wherein partitioning the layer into a plurality of ~~stripes~~ regions comprises automatically generating partitions so that each important feature is within one of the ~~stripes~~ regions.

11. (Original) The method of claim 10, further comprising calculating a writing time for the writing plan.

12. (Original) The method of claim 11, further comprising accepting or rejecting the writing plan based on the writing time.

13. (Currently Amended) A system comprising:

means for generating an integrated circuit design;

means for creating a design database containing design data for ~~each~~ a layer of the design;

means for creating context information for features of ~~a~~ the layer ~~of the design~~;

means for analyzing the context information to identify the important attributes of features of the layer;

means for partitioning the layer into a plurality of ~~stripes~~ geographical regions;

means for assigning each feature to one or more of the plurality of ~~stripes~~ regions, based upon its attributes; and

means for devising a writing plan to write each important feature within the corresponding ~~stripe~~ region.

14. (Currently Amended) The system of claim 13, wherein said means for analyzing the context information to identify important features comprises:

means for identifying important attributes of the design; and

means for identifying polygons with the important attributes.

15. (Currently Amended) The system of claim 14, further comprising:

means for dividing each important polygon into a plurality of shapes; and

means for identifying shapes with the important attributes for each polygon.

16. (Currently Amended) The system of claim 15, wherein said means for assigning each important feature to one ~~stripe~~ region comprises means for assigning each shape with the important attributes to one ~~stripe~~ region.

17. (Currently Amended) The system of claim 13, wherein said means for analyzing the context information to identify important features comprises:

means for displaying the design data for the layer to a user;

means for displaying the context information for the features of the layer to the user; and

means for receiving an identification of the important features from the user.

18. (Currently Amended) The system of claim 17, wherein said means for assigning each important feature to one of the ~~stripes~~ regions comprises means for receiving an assignment of the feature to one ~~stripe~~ region from the user.

19. (Original) The system of claim 18, further comprising means for calculating a writing time for the writing plan.

20. (Currently Amended) The ~~method~~ system of claim 19, further comprising means for accepting or rejecting the writing plan based on the writing time.

21. (Original) The system of claim 13, wherein said means for analyzing the context information to identify important features comprises means for automatically locating important features of the layer based on the context information.

22. (Currently Amended) The system of claim 21, wherein said means for partitioning the layer into a plurality of ~~stripes~~ regions comprises means for automatically generating partitions so that each important feature is within one of the ~~stripes~~ regions.

23. (Original) The system of claim 21, further comprising means for calculating a writing time for the writing plan.

24. (Original) The system of claim 23, further comprising means for accepting or rejecting the writing plan based on the writing time.

25. (Currently Amended) A method comprising:

generating integrated circuit design data having a plurality of polygons;

determining context information from the integrated circuit design data; and

analyzing features of the design data with the context information to distinguish important attributes of features from unimportant attributes and features; and

adjusting a mask writing process to write each feature with an accuracy commensurate with the importance of the attributes of that feature.

26. (Cancelled)

27. (Currently Amended) The method of claim 25 wherein context information for the design features comprises: information for neighboring geometries, electrical intent of the features, timing of the intended circuit, redundant features, and relationships of a given feature to neighboring features.

28. (Currently Amended) The method of claim 25 further comprising: identifying an importance of a given feature, or of a given attribute of a given feature, relative to other features of the design based on context information.

29. (Currently Amended) The method of claim 28, wherein the relative importance is identified with context information comprising: a reason for locating the feature in a particular place

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within the design, an intended use of the feature within the design, and electrical requirements of the feature within the design.

30. (Currently Amended) A system comprising:

means for generating integrated circuit design data having a plurality of polygons;

means for determining context information from the integrated circuit design data; and

means for analyzing features of the design data with the context information to distinguish important attributes of features from unimportant attributes; and

means for adjusting a mask writing process to write each feature with an accuracy commensurate with the importance of the attributes of that feature.

31. (Cancelled)

32. (Currently Amended) The system of claim 30 wherein context information for the design features comprises: information for neighboring geometries, electrical intent of the features, timing of the intended circuit, redundant features, and relationships of a given feature to neighboring features.

33. (Currently Amended) The system of claim 30 further comprising: means for identifying an importance of a given feature relative to other features of the design based on context information.

34. (Currently Amended) The system of claim 33, wherein the relative importance is identified with context information comprising: a reason for locating the feature in a particular place within the design, an intended use of the feature within the design, and electrical requirements of the feature within the design.

35. (New) The method of claim 1, wherein the geographical regions are stripes.

36. (New) The system of claim 13, wherein the geographical regions are stripes.